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I. Proposed Action:

Clark County, a political subdivision of the State of Nevada, has requested a Right-of-way Grant (Grant) for the Upper Duck Creek Interim Detention Basin (Basin) and Diversion Berm/Channel (Berm/Channel), N-76038-A, and for an access road, N-76038-B.

II. Need for Proposed Action:

A 100-year flood event in the Duck Creek/Blue Diamond Watershed flows at a rate of 11,169 cubic feet/second (cfs). Construction of the Upper Duck Creek Interim Detention Basin and associated Berm/Channel will reduce storm water events down to approximately 400 cfs. This reduction will allow for development of private property and public facilities to the east that will be protected from flood damage.

III. Alternatives Considered:

Alternative 1: The 1991 Flood Control Master Plan Update Las Vegas Valley (Figure 1) identifies the Upper Duck Creek Detention Basin (#2158) and associated diversion channel (#2159) in a location west of the proposed action. The location was shifted further west in order to avoid future Gomer Road, an east-west section line road, that may become a major roadway as future development expands in this part of the southwestern Las Vegas Valley. Additionally, the shift west will maximize the use of federal lands for basin construction and avoid the acquisition of several private properties situated along Gomer Road. Therefore, this alternative was dropped from further consideration**.**

Alternative 2, No Action Alternative: Without construction of the proposed action, future development to the east including the proposed Mountain's Edge Master Planned Community, public parks, schools, and residential homes would be adversely affected from storm water runoff events.

IV. Description of Proposed Action:

N-76038-A Upper Duck Creek Interim Detention Basin and Diversion Berm/Channel (383.0 acres)

The Basin and Berm/Channel are located within the 48.5 square mile Duck Creek/Blue Diamond Watershed (Watershed) in the southwest part of the Las Vegas Valley south of Blue Diamond Road at S. Hualapai Way. (Further discussion of the Duck Creek/Blue Diamond watershed can be found in the *Clark County Regional Flood Control District 2002 Las Vegas Valley Flood Control Master Plan Update Volume 1*, incorporated by reference.) The Basin, identified as DCWA 2261 in Figure F-19, *2002 Las Vegas Valley Flood Control Master Plan Update, Flood Control Facilities, Volume 2* (Figure 2) will reduce existing 100-year flow rates of 11,169 cubic feet/second (cfs) down to approximately 400 cfs.

The Basin is comprised of a single excavated detention basin and a Roller-Compacted Concrete (RCC) stepped spillway with a low-flow outlet structure. The embankment slopes with a maximum height of 54 ft. will be maintained at a maximum ratio of 3:1. The RCC stepped spillway (960 ft. long) and surrounding embankment are primarily comprised of native material. The spillway is armored for erosion protection consisting of grouted stone and soil cement lining in critical areas.

The Berm/Channel (identified as DCWA 2262 in Figure 2) is located at the northwest corner of the Basin and is 200 ft. wide x 2,700 ft. long. It will divert flows of approximately 2,700 acre feet into the Basin where the flow will be released through natural washes approximately 900 feet south of the north boundary of the Basin property near S. Hualapai Way.

The Basin embankment and Berm will be constructed of excavated material from the Basin and Channel. There is no need to import/export material as the Basin is designed with the goal of balanced cut and fill. Any excess material will be used for soil cement (18,280 c.y.), RCC (65,140 c.y.), and grouted stone (18,480 c.y.).

Earthwork:	Overall Excavation: 1,858,700 c.y. Fill (Embankment): 1,485,300 c.y.	Assumed shrinkage factor: 7.83%

Construction equipment consists of excavation and earthmoving vehicles for the removal of material from the basin floor and embankment construction. Specialized equipment to excavate areas where caliche pockets are found may be necessary. Equipment for crushing and mixing aggregate for laying the RCC material for the spillway and energy dissipator will be used. Fencing is proposed at the temporary crossing over the Berm/Channel in order to restrict vehicular traffic. This crossing will allow all-weather access for storms up to a 100-year magnitude. Additionally, a short cable and post structure is proposed along the north portion of the embankment to prevent vehicles from driving on the embankment.

Fencing is proposed at the temporary crossing over the Berm/Channel in order to restrict vehicular traffic. This crossing will allow all-weather access for storms up to a 100-year magnitude. Additionally, a short cable and post structure is proposed along the north portion of the embankment to prevent vehicles from driving on the embankment.

Design Features:	Basin:	Area at dam spillway crest 170.92 acres Gross capacity at spillway crest: 2,643.78 acre feet Peak storage capacity: 2,578 acre feet Allocated sediment capacity: 187.10 acre feet
	Embankment:	54 ft. maximum height . 9,500 ft. in length 3,000 ft. crest elevation 25 ft. crest width 500 ft. maximum base width

Spillway:	2,988.82 ft. crest elevation 2,987.56 ft. elevation of 100-year water surface 960 ft. crest length
Outlet Works:	Diameter of concrete pipe: 60-inch RCP Length of concrete pipe: approximately 245 feet Intake elevation: 2,961.75 feet

Source: *Upper Duck Creek Interim Detention Basin Addendum to Revised Final Design Memorandum*, *May 13, 2003* (located in case file N-76038)

Non-Federal Parcels

Three private parcels are located within the boundary of the Basin. Clark County has purchased two of these parcels and the third has been condemned by the District Attorney's office. Legal occupancy upon this parcel was granted by District Court in May 2003.

N-76038-B Access Road (S. Haulapai Way) (8.423 acres)

Currently a dirt road extends from Blue Diamond Road to a point approximately 1,200 feet north of the project site. This road (future S. Hualapai Way) will be extended to the site for construction vehicle access. In the future, this road will be fully improved in conformance with Clark County standards.

Anticipated construction sequence:

Grading of access road in future S. Haulapai Way alignment
Excavation of basin and diversion channel
Embankment formed with excavated material
Construction of diversion berm/channel
Installation of low-flow pipe
Construction of RCC spillway and energy dissipator
Construction of headwall and trash rack
Construction of interior access roads
Installation of channel and basin erosion control armoring

The workforce includes survey crews, inspectors, contractors, laborers, and equipment operators. The Basin, Channel, and access road will be maintained by Clark County. Maintenance includes removal of sediment and debris from the basin and diversion channel, maintenance of diversion channel, basin, spillway, energy dissipator, low-flow pipe, temporary crossing over Channel, and the access road. Construction is scheduled to begin in June 2003 and estimated to last 6 months. No temporary work areas will be needed and the Grant would be issued in perpetuity.

Fugitive dust will be generated by construction activities including particulate emissions from grading, trenching, crushing, screening, and back filling. A localized increase in

emissions of Carbon Monoxide (CO) will occur from construction vehicles and equipment. Water will be used to mitigate fugitive dust pollution (Appendix A: *Final Upper Duck Creek Detention Basin Dust Mitigation Plan, July 17, 2003*).

Though the total acreage for the Basin, Berm/Channel, and access road is 391.423 acres, the construction footprint of the project affects only 197.0 acres. The "construction footprint" acreage was used in the air quality analysis for this project (Figure 3). For further information see section VII. Environmental Impacts: Air Quality.

On July 21, 2003, the State of Nevada Department of Conservation and Natural Resources approved the plans and specifications for the construction of the Basin and associated structures (Exhibit A).

Probable Maximum Flood (PMF) Area (230 acres):

Within the boundary of the Grant lies what is termed the Probable Maximum Flood (PMF) boundary (approximately 230 acres) which represents approximately 10 times the 100-year flood event with a water surface elevation of 2,998.31 ft. at the spillway (Figure 4). Storage volume of the PMF area is 4,714 acre feet with a maximum inflow 91,987 cfs and maximum outflow 89,708 cfs. The PMF was calculated based on *Hydrometeorological Report No. 49* (HR 49).

Location of Proposed Action (Exhibit B):

N-76038-A: Duck Creek Interim Detention Basin and Diversion Berm/Channel:

T. 22 S., R. 59 E., M.D.M., sec. 24, W½SE¼SW¼SE¼, SW¼NE¼SW¼SE¼, SE¼NW¼SW¼SE¼, N½NW¼SW¼SE¼, SE¼SW¼NW¼SE¼, W½SW¼NW¼SE¼, SE¼SE¼NE¼SW¼,

T. 22 S., R. 59 E., M.D.M., sec. 25, NE¼NE¼, SE¼NE¼, E½ W½NE¼, NE¼NW¼NW¼NE¼, N½NE¼SE¼, NE¼NW¼SE¼, N½SE¼NW¼SE¼, N½SW¼NE¼SE¼, N½SE¼NE¼SE¼, SE¼SE¼NE¼SE¼,

T. 22 S., R. 60 E., M.D.M., sec. 30, lot 3 excepting there from the south 335 feet of the east 920 feet, lots 5-12, lots 14-17, lots 19-36, W½SW¼SW¼SW¼NE¼, NW¼NE¼NW¼, E½SW¼NE¼NW¼, SW¼SW¼NE¼NW¼, W½W½E½NE¼NW¼, NW¼SE¼NW¼, W½W½NE¼SE¼NW¼, W½SE¼SE¼NW¼, W½NE¼SE¼SE¼NW¼, SE¼SE¼SE¼NW¼, SW¼SE¼NW¼, N½NE¼SW¼, N½S½NE¼SW¼, W½W½NW¼NW¼SE¼, W½NW¼SW¼NW¼SE¼.

(approximately 383.0 acres)

N-76038-B: Access Road (S. Hualapai Way) 60 ft. wide x 6,115 ft. long

T. 22 S., R. 59 E., M.D.M., Sec. 24, E½SE¼SE¼NE¼, E½NE¼NE¼SE¼, E½NE¼NE¼SE¼,
T. 22 S., R. 60 E., M.D.M., Sec. 19, lot 16, that portion lying south of Nev-012728, lots 17, 24, 25, 32, 40, 41, 48, 49, 56, 57, 64, and 65.

(approximately 8.423 acres)

RS 2477 Roads (Exhibit C)

There are private parcels bordering the northern boundary of the Basin. Existing access is assumed to be available to these properties via patent easements or by two Clark County claimed RS 2477 roads (# 26 and #27) (Figure 3). Access for these roads will be provided across the northern end of the Berm/Channel for #26 (24 ft. wide x 200 ft. long) and along the north and west boundary of the Basin for # 27 (32 ft. wide x 4,580 ft. long). A separate right-of-way authorization will be issued for the access road located within the boundaries of the basin with the following legal description:

T. 22 S., R. 59 E., sec. 25, N½N½NE¼NE¼, E½NW¼NE¼,
NE¼NW¼NW¼NE¼, E½SW¼NE¼.
(approximately 3.365 acres)

V. Conformance with Applicable Land Use Plans and Existing NEPA Documentation

The proposed action is in conformance with the Las Vegas Resource Management Plan (RMP) approved October 5, 1998. The RMP has been reviewed and it is determined the proposed action conforms with land use plan decision RW-1 in that it "meets public demand and reduces impacts to sensitive resources by providing an orderly system of development for transportation, including legal access to private in holdings, communications, flood control, major utility transmission lines, and related facilities" and RW-1-d which "provides right-of-way access for local flood control agencies to develop or maintain flood control developments consistent with right-of-way avoidance and exclusion areas". The proposed action conforms with the land use plan terms and conditions as required by 43 CFR 1610.5-3 under the authority of the Federal Land Policy Management Act (FLPMA).

The following documents, incorporated by reference, are referenced for site specific and cumulative analysis pertaining to construction and air quality impacts, terms and conditions, and stipulations:

Clark County Regional Flood Control District Master Plan #910106 - Record of Decision signed 6-4-91

Las Vegas Resource Management Plan Environmental Impact Statement - Record of Decision signed 10-5-98

VI. Affected Environment

The proposed action is located in the Southwest Las Vegas Valley Subarea as identified in the Draft EIS Flood Control Master Plan Clark County Regional Flood Control District, Volume 1, Environmental Setting and Impact Analysis, October 1990 (Master Plan EIS), incorporated by reference. A discussion of the overall environmental conditions and meteorology is presented in Section 4.1 and 4.1.1 (pg. 4-1). A description of the geologic environment is found in Sections 5.1 (pg. 5-1) through 5.2 (pg. 5-11). Potential geologic hazards are addressed in Section 5.2 (pg. 5-11). A description of the geological environment for the area is presented in Section 5.3.3 (pgs. 5-17 and 5-18) that identifies the area as primarily being composed of Quaternary alluvium, pediment-deposits, and Paleozoic sedimentary rocks. The existing hydrogeologic setting is discussed in Section 6.1 (pg. 6-1) and Section 6.2.3 (pg. 6-10) addresses the Southwest Las Vegas Valley Subarea that identifies the presence of shallow aquifers, near-surface reservoir, and principal aquifers. Surface water resources are presented in Section 7.1 (pg. 7-1) and consist mainly of dry washes that only flow during infrequent rain events. Section 7.2.3 (pg. 7-8) identifies the general drainage pattern in the Southwest Las Vegas Valley to be from the west to Las Vegas Wash in the east. Vegetation types and wildlife habitats are discussed in Section 8.1.1 (pg. 8-1) and Section 8.2.3 (pg. 8-15) identifies the Desert Tortoise as the only Threatened or Endangered species occurring within the Southwestern Las Vegas Valley. General land use and recreation resources are discussed in Section 9.1 (pg. 9-1) and this area consists of the largest proportion of desert open space relative to other land use classifications, Section 9.2.3 (pg. 9-4). Visual resources are presented in Section 10.1 (pg. 10-2).

VII. Environmental Impacts This Environmental Assessment is prepared in order to address specific impacts associated with the proposed action that are either lacking in the Master Plan EIS analysis or for which new information is available.

Critical Element	Affected		Critical Element	Affected	
	Yes	No		Yes	No
Air Quality	**x**		Native American Religious Concerns		**x**
ACECs		**x**	T & E Species (animal or plant)	**x**	
Cultural Resources		**x**	Wastes, Hazard/ Solid		**x**
Environmental Justice		**x**	Water Quality		**x**
Farmlands, Prime/Unique		**x**	Wetlands/Riparian Zone		**x**
Floodplains		**x**	Wild and Scenic Rivers		**x**
Migratory Birds	**x**		Wilderness		**x**
Noxious Weeds/Invasive Non Native Species		**x**			

Air Quality

The Clean Air Act (CAA), last amended in 1990, requires the Environmental Protection Agency (EPA) to set National Ambient Air Quality Standards (NAAQS) for pollutants considered harmful to public health and the environment. The EPA Office of Air Quality Planning and Standards has set NAAQS for six criteria pollutants. Clark County (Las Vegas, Nevada) is considered a "serious" non-attainment area for particulates with diameters of 10 micrometers or less (PM10) and Carbon Monoxide (CO), two of the criteria pollutants.

Clark County Department of Comprehensive Planning and the Clark County Department of Air Quality Management (DAQM) are the agencies responsible for addressing air pollution in the Las Vegas Valley. DAQM has prepared and submitted a PM10 State Implementation Plan (PM10 SIP) to EPA for a conformity determination as required by CAA section 176 (c). Conformity to the PM10 SIP means that transportation activities will not produce new air quality violations, worsen existing violations, or delay timely attainment of the NAAQS. EPA has yet to approve the PM10 SIP.

On September 12, 2000, EPA found the CO Air Quality Implementation Plan to be complete under CAA, section 110(k)(1). On November 30, 2000, EPA published a Notice of Adequacy Determination in the *Federal Register* (Volume 65, Number 231) notifying the public that the CO Air Quality Implementation Plan was found "adequate" for transportation conformity purposes.

1998 BLM Disposal Boundary, as amended by the Southern Nevada Public Land Management Act of 1998 (P.L. 105-263)

The PM10 SIP is based on the premise that all soil disturbing construction activities will take place within the 1998 BLM Disposal Boundary (Boundary). However, the proposed action falls on the Boundary with a portion of the project inside (T. 22 S., R. 60 E., sec. 30, N1/2 and sec. 19) and the remainder outside. In order to conform to its PM10 SIP, Clark County cannot issue construction permits for construction projects outside of the Boundary. However, this prohibition does not extend to projects such as the proposed action that do not result in the emission of PM10 post-construction though small amounts of PM10 will be generated when the site is monitored and maintained. Dust Control Permits for areas outside of the Boundary are issued on a case-by-case basis with consideration given to the type of project, amount of acreage, final stabilization, and potential to emit fugitive dust after completion of the project.

Emission Calculation Methodology

An "activity specific" calculation was used rather than the less accurate "disturbed acreage" calculation. The use of an activity specific calculation allows for the consideration of specific emission parameters and dust mitigation measures that are applied to each project activity. It also has the advantage of showing the relative contribution of each activity such that emission control can be more effectively managed.

The emissions from the project include fugitive PM10 (dust) emissions from mass grading and vehicle traffic in addition to diesel exhaust emissions of CO and PM10 emissions from diesel powered construction vehicles and generators.

The project activities included in the emission inventory are:

1. Mass Grading
2. Unpaved Access Road Emissions
3. Dozer Emissions (includes rip and push)
4. Storage Piles and Material Handling
5. Crushing & Screening Equipment Emissions
6. Open Disturbed Areas
7. Off Road Diesel Emissions

(Appendix B *Revised Upper Duck Creek Detention Basin Emission Inventory, July 16, 2003*.)

Conformity Determination

Since the proposed action is located within the CO and PM10 serious non-attainment area and potential CO and PM10 emissions are not (1) covered by an approved PM10 SIP, (2) excluded by regulating authority, (3) categorically excluded under the General Conformity regulations, nor (4) fully offset by corresponding CO andPM10 emissions reductions, it was necessary to prepare a comprehensive CO and PM10 emissions inventory before determining if BLM should prepare a formal General Conformity Determination (including atmospheric dispersion modeling, public review and comment and formal agency response).

EPA strongly recommends that when emissions are to be estimated for a particular construction site such as the proposed action, the construction process be broken down into component operations. This approach to emission estimation uses a unit or phase method to consider the more basic dust sources of vehicle travel and material handling. That is, the project is viewed as consisting of several operations each involving traffic and material movements (AP42, Chapter 13: Miscellaneous Sources, 13.2.3 Heavy Construction Operations). Therefore, a "project specific" CO and PM-10 emissions inventory was prepared in order to determine if the project would require a CAA General Conformity Determination as required in 40 C.F.R. Part 93.

The predicted CO emission levels of 8.94 tons per year during calendar year 2003, 7.24 tons per year during calendar year 2004, and 16.19 tons per year throughout the life of the project are all well below the regulatory de minimis level of 100 tons per year. Similarly, the predicted PM-10 emission levels of 37.68 tons per year during calendar year 2003, 29.02 tons per year during calendar year 2004, and 66.69 tons per year throughout the life of the project are also below the regulatory de minimis level of 70 tons per year [40 CFR 93.153(b)(1)].

On August 4, 2003, BLM signed a "Conformity Analysis Certification" (Appendix C) determining that the proposed action conforms with all applicable local, state, and federal air quality laws, regulations, and statutes.

Therefore, BLM is not required to conduct a formal General Conformity Determination.

In general, impacts associated with air quality are anticipated to be minor, temporary, and short term in nature. Increased emissions of PM_{10} will likely occur as a result of soil disturbance associated with vegetation removal, construction activities, and movement of construction equipment However, the use of water during construction activities and the subsequent application of acceptable soil stabilizing techniques will reduce the potential emissions.

Operational Requirements

There will be up to 102 days of operations during calendar year 2003 disturbing approximately 36.5 acres of land with 15 scrapers loading/unloading up to 1.4 million total tons of material. During calendar year 2004 with up to 73 days of operations, approximately 160.5 acres of land will be disturbed with 15 scrapers operating loading/unloading up to 1.0 million tons of material, with crushing (at 600 horsepower) and screening to provided a stockpile of 170,000 tons of RCC aggregates. All operations would be conducted for seven hours during each workday, and would also include four bulldozers, two watering trucks, and 59 support and general construction vehicle round trips per day.

In order to achieve the air pollutant control levels assumed in developing the emissions inventory, the operator will need to water soils during grading, exposed/disturbed land, and road surfaces at a rate sufficient to maintain material moisture at 2.5 per cent (or higher). Alternatively, other road surface treatments (palliatives) may be applied to achieve at least a 90 per cent control level. Crushing/screening materials and storage piles will be watered at a rate sufficient to maintain material moisture at 4.0 per cent (or higher) until the material is redistributed. During scraping (removing and unloading) and bulldozing, soils will be watered at a rate sufficient to maintain material moisture at 5.0 per cent (or higher) (Scott Archer, BLM Senior Air Resource Specialist).

Visual Resources

The proposed action is located within a Visual Resource Management (VRM) Class IV area. As identified in the Las Vegas Resource Management Plan (RMP), Objective VS-1 is to "Limit future impacts on the visual and aesthetic character of the public lands." Also, the RMP directs (VS-1c) that areas identified as Class IV (RMP Map 2-9) are to be managed to allow activities involving major modification of the landscape's existing character. Authorized actions may create significant landscape alterations and would be obvious to casual viewers.

Although the proposed project is within a Class IV VRM area, mitigation measures should still be taken to minimize the contrast between the project and the existing visual landscape. These mitigation measures should include, but are not limited to, the use of a rock cap; restoration of surface disturbance to minimize the contrast with undisturbed adjacent areas; use of an agent such as Permeon to reduce contrast; placement of native vegetation on the structure; and a structure design that minimizes (interrupts) a consistent linear line.

Cultural Resources
Section 106 of the National Historic Preservation Act of 1966 requires that Federal agencies take into account the effect of their undertakings on historic properties. Efforts to identify and evaluate cultural resource properties for this project according to 36 CFR 800.4 are described in Las Vegas District Class 1 Cultural Resource Report 5-2121, Proposal to Limit Archaeologist Survey in Las Vegas Valley, Southern Nevada, by Keith Myhrer, Area Archaeologist, April, 1991.

The Class 1 overview provides documentation that a relatively large number of inventories had been previously conducted within the Las Vegas Valley zone. The results of the surveys indicate that with the exception of four identified sensitive subzones, the lands within Las Vegas Valley are considered to be of very low sensitivity for the presence of cultural resource eligible for nomination to the National Register of Historic Places.

The Area of Potential Effect (APE) is outside of the area covered by BLM's programmatic agreement with the State Historic Preservation Office. Portions of the APE were previously inventoried for cultural resources (# 5-2428A). The remainder of the APE was inventoried at a Class III level with a negative finding (# 5-2428 and 5-2428b). No additional inventory is required for this project.

Environmental Justice
According to Executive Order 12898 of February 11, 1994, all Federal actions must address and identify as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies and activities on minority populations and low-income populations in the United States. The subject action was evaluated and no disproportionately high or adverse human health or environmental effects were identified for minority of low-income populations.

Migratory Birds
The project area consists of the Mojave shrub vegetative community. This community provides suitable resting, foraging, and nesting habitat for a wide variety of bird species including but not limited to burrowing owl, loggerhead shrike, Scott's oriole, ash-throated flycatcher, mourning dove, horned lark, lesser nighthawk, and black-throated sparrows. A complete list of protected birds including additional species with potential to occur in the project area can be found in 50 C.F.R. 10.13.

The Migratory Bird Treaty Act (Act) of 1918 and subsequent amendments (16 U.S.C. 703-711) state that it is unlawful to take, kill, or possess migratory birds. Existing migratory bird permit regulations authorize take for specific types of activities such as collecting birds for scientific or educational purposes, or lethal control of birds damaging agricultural crops, or other personal property. However, unlike the Endangered Species Act, there are no provisions for take of covered birds for activities such as forestry and agricultural operations or construction activities. As a result, the Act requires all such activities be implemented in such a way as to avoid impacts to bird species protected by the Act.

On January 11, 2001, Executive Order 13186 was signed by President Clinton further defining federal agencies responsibilities under the Migratory Bird Treaty Act. In accordance with Executive Order 13186, the Bureau of Land Management has developed measures to ensure that construction of the proposed action is in compliance with the Act by requiring proponents to avoid take of protected bird species.

Threatened and Endangered Species

The above action has a may affect determination for the threatened desert tortoise (*Gopherus agassizii*) and will have no affect on any other listed species or designated critical habitat. The proposed action will disturb 237.85 acres of tortoise habitat based on potential 100 year flood water levels within the basin. This includes 219.2 acres for the Basin, 13.88 acres for the Berm/Channel, and 4.77 acres for the access road. Section 7 Consultation for the desert tortoise is covered under the *Biological Opinion for the Clark County Regional Flood Control Master Plan, File No. 1-5-93-F-67R* (Exhibit B) contingent on compliance with terms and conditions for the "exterior zone". The proponent will be required to pay remuneration fees of $154,126.80 based on the current year's rate of $648.00/acre of disturbance. If fees are paid after March 1, 2004, this rate is subject to change as described in Exhibit B.

Noxious Weeds/Invasive Non Native Species

The Federal Noxious Weed Act, Public Law 93-629 (7 U.S.C. 2801 et seq.; 88 Stat. 2148), enacted January 3, 1975, established a Federal program to control the spread of noxious weeds. Executive Order 13112 issued February 3, 1999 further defines the responsibilities of Federal Agencies to prevent the introduction of invasive species and provide for their control by minimizing the economic, ecological and human health impacts that invasive species cause. The issuance of a right-of-way grant for this project requires the proponent to comply with the Executive Order 13112 and prevent the spread or introduction of invasive species and noxious weeds.

Vegetation

Three special status plant species could be impacted by this action: Las Vegas bearpoppy (*Arctomecon californicum*), Las Vegas Valley buckwheat (*Eriogonum corymbosum* var. *aureum*), and two-tone penstemon (*Penstemon bicolor*). Cacti, yucca, and catclaw habitat also occur on undisturbed lands in the Las Vegas Valley. Cacti/yucca density increases at the periphery of the valley. Catclaw habitat occurs in drainages and washes. This latter habitat provides cover, forage, and nesting sites for many neo-tropical bird species. Rosy two-toned penstemon and bicolor penstemon may occur in the project area. Yellow two-tone penstemon are found within the project area and GPS documentation of locations and seed collection will be completed by BLM prior to any construction activities.

The project requires a restoration plan that incorporates salvage of cacti and yucca; identifies stockpiling sites for topsoil and succulents impacted by the project; includes a seed mix and application actions on the outside berms of the project; and includes visual restoration actions. Prior to construction, a restoration plan will be created in order to address restoration needs. The area should be seeded with a native seed mix that BLM will provide. Salvaged cacti and yucca will be planted around the outside lower edge of the basin.

No salvage of the Rosy two-toned penstemon and bicolor penstemon plants will be required, however, 4-6 inches of topsoil should be salvaged and stockpiled separately from the construction areas and used in restoring the outside banks of the detention basin.

Wildlife

Wildlife species in the general area include small mammals, rodents, birds and reptiles. Most of these species are common and widespread in distribution.

VIII. Mitigation Measures and Residual Impacts

1. All activities within the right-of-way area shall be in compliance with the *Biological Opinion for the Clark County Regional Flood Control Master Plan, File No. 1-5-93-F-67R* (Exhibit D). This project will disturb a total of 237.85 acres of tortoise habitat. Holder shall pay remuneration fees of $154,126.80 based on the current year's rate of $648.00/acre of disturbance. Prior to surface disturbance, mitigation fees shall be paid and proof of payment provided to BLM. Once received, a Notice to Proceed shall be issued.

2. Prior to construction, a restoration plan will be completed that shall (1) incorporate the salvage and re-planting of cacti and yucca around the outside lower portion of the detention basin and the removal of unused salvage material to the Desert Tortoise Center, (2) identify stockpiling sites for topsoil and succulents impacted by the project, (3) include a native seed mix provided by BLM and application actions on the outside banks of the project (4-6 inches of topsoil shall be salvaged and stockpiled separately from the construction areas for this purpose), and (4) include visual restoration actions. Visual restoration shall include use of a rock cap, restoration of surface disturbance to minimize the contrast with undisturbed adjacent areas, use of an agent such as Permeon to reduce contrast; and utilization of a structure design that minimizes (interrupts) a consistent linear line. Examples of restoration plans can be obtained from the BLM Botanist at (702) 515-5156.

3. In accordance with the *Final Upper Duck Creek Detention Basin Dust Mitigation Plan, July 17, 2003*, the operator shall water soils during grading and water exposed/disturbed land and road surfaces at a rate sufficient to maintain material moisture at 2.5 per cent (or higher). Alternatively, other road surface treatments (palliatives) may be applied to achieve at least a 90 per cent control level. Crushing/screening materials and storage piles will be watered at a rate sufficient to maintain material moisture at 4.0 per cent (or higher) until the material is redistributed. During scraping (removing and unloading) and bulldozing, soils will be watered at a rate sufficient to maintain material moisture at 5.0 per cent (or higher).

4. Efforts shall be taken to minimize impacts to vegetation during all phases of activities within the right-of-way area. This may include pre-disturbance surveys to identify vegetation suitable for salvage and to ensure that protected or sensitive plant species are properly protected. Topsoil will be stockpiled and utilized in post construction reclamation efforts. Weed control measures will be utilized on all disturbed areas within the right-of-way area.

5. Efforts shall be taken to preserve surface and subsurface cultural and paleontological resources that may be encountered within the right-of-way area.

6. To mitigate the potential for adverse air and water quality impacts, all activities within the right-of-way area shall be in conformance with all applicable Federal and State air and water quality laws.

7. Efforts shall be taken to minimize impacts to wildlife during all phases of activities within the right-of-way area.

8. Should hazardous materials be spilled or deposited within the right-of-way area by the Holder, its agents or a third party, the Authorized Officer for the BLM Las Vegas Field Office shall be immediately notified. Any clean up or reporting requirements shall be completed in compliance with all applicable State and Federal laws and regulations.

9. Holder agrees to survey for nests of migratory birds between the periods of March 1 through August 30, and, should a nestling be found, Holder will use properly qualified personnel, as agreed upon by BLM and Holder, to avoid the nest or minimize adverse impacts to the nest and nestling, including relocation of the nest if appropriate. Holder will consult with the Authorized Officer on a case-by-case basis to determine the appropriate minimization efforts.

10. Efforts shall be taken to prevent the spread or introduction of invasive or noxious weed species.

IX. Recommendation and Rationale

Recommendation: It is recommended that a site type Right-of-way Grant (Grant) containing approximately 383.0 acres for the Upper Duck Creek Detention Basin and diversion channel/berm (N-76038-A) and a road Grant 60 ft. wide x 6,115 ft. long totaling 8.423 acres (N-76038-B) be granted to Clark County, a political subdivision of the State of Nevada, in perpetuity for the above described land. The Grant is made under the authority of Title V of the Federal Land Policy and Management Act of October 21, 1976 (43 U.S.C. 1761). The Grant shall be subject to the terms and conditions in 43 CFR 2801. Clark County is exempt from cost recovery and rental payment as determined by 43 CFR 2808.1(a)(2) and 43 CFR 2803.1-2(b)(1)(i), respectively. The Grant shall be subject to the standard stipulations applicable to this type of action and the special stipulations identified in Exhibit A.

Rationale:

1. The proposed action is constant with promoting the utilization of rights-of-way in common with respect to engineering and technological compatibility and land use plans (43 CFR 2800.2(c)).

2. The proposed action supports coordination with State and local governments, interested individuals and appropriate quasi-governmental entities (43 CFR 2800.2(d)).

3. No known Federal programs will be adversely affected by this proposed action. Even though the subject land is within the area defined by Public Law 105-263 (Southern Nevada Public Land Management Act of 1998) [and Public Law 96-586 (Santini-Burton Act)], which provide for the sale of public lands in the Las Vegas Valley. The Act[s] recognizes the need for orderly community development and infrastructure needs associated with development of both public and private lands. The requested right-of-way is necessary for the normal functioning of the community, and therefore not in conflict with the Act[s].

4. The recommendation to issue a right-of-way on Federal lands in order to meet the stated objective RW-1 in the Las Vegas Resource Management Plan approved October 5, 1998.

X. Persons/Agencies Consulted

Scott F. Archer, BLM Senior Air Resource Specialist
Kristen Murphy, BLM Biologist
Stanton Rolf, BLM Archaeologist
Donn Siebert, BLM Wilderness/Visual Resource Specialist
Gayle Marrs-Smith, BLM Botanist
Jeff Steinmetz, BLM Environmental Protection Specialist

Mark Miller, Justice & Associates
Maria Nelson, Project Manager, Mountains Edge LLC
Charles Richter, Clark County Department of Air Quality Management

EXHIBIT E: STIPULATIONS N-76038-A and N-76038-B

1. Holder shall comply with the stipulations, terms, and conditions of the *Clark County Regional Flood Control District Master Plan EIS #910106*, approved in June 4, 1991, on file at the Bureau of Land Management, Las Vegas Field Office.

2. All activities within the right-of-way area shall be in compliance with the *Terms and Conditions of the Biological Opinion for the Clark County Regional Flood Control District's Master Plan, File No. 1-5-93-F-67R* (Exhibit D). This project will disturb a total of 237.85 acres of tortoise habitat. Holder shall pay remuneration fees of $154,126.80 based on the current year's rate of $648.00/acre of disturbance. Prior to surface disturbance, mitigation fees shall be paid and proof of payment provided to BLM. Once received, a **Notice to Proceed** shall be issued.

3. Prior to construction, a restoration plan will be completed by Holder that shall (1) incorporate the salvage and re-planting of cacti and yucca around the outside lower portion of the detention basin and the removal of unused salvage material to the Desert Tortoise Center, (2) identify stockpiling sites for topsoil and succulents impacted by the project, (3) include a native seed mix provided by BLM and application actions on the outside banks of the project (4-6 inches of topsoil shall be salvaged and stockpiled separately from the construction areas for this purpose), and (4) include visual restoration actions. Visual restoration shall include use of a rock cap, restoration of surface disturbance to minimize the contrast with undisturbed adjacent areas, use of an agent such as Permeon to reduce contrast; and utilization of a structure design that minimizes (interrupts) a consistent linear line. Once received, a **Notice to Proceed** shall be issued prior to construction activities. Examples of restoration plans can be obtained from the BLM Botanist, 515-5156.

4. **Sixty (60) days prior to construction activities**, cacti and yucca that would be impacted by the project will be salvaged and appropriately transported in accordance with *Standard Operating Procedures for the Salvage, Transportation, and Care of Cacti and Yucca on BLM Land* (Exhibit F). All salvaging actions will be coordinated with the Authorized Officer who will determine how the plants will be used in re-vegetation. These activities shall be coordinated with the Forestry program at BLM. A **Notice to Proceed** shall be issued prior to construction activities.

In order to facilitate re-vegetation, the first three to six inches of topsoil will be stockpiled in areas where ground disturbance occurs. The stockpiled material would then be placed on top of the berms. The seeds within the soil should provide a source for future plant germination.

Mitigation measures for potential impacts to the Las Vegas bear poppy will be determined on a case-by-case basis whenever this species is found in a proposed project area. These activities would be coordinated with the Authorized Officer.

5. In accordance with the *Final Upper Duck Creek Detention Basin Dust Mitigation Plan, July 17, 2003*, the operator shall water soils during grading and water exposed/disturbed land and road surfaces at a rate sufficient to maintain material moisture at 2.5 per cent (or higher). Alternatively, other road surface treatments (palliatives) may be applied to achieve at least a 90 per cent control level. Crushing/screening materials and storage piles will be watered at a rate sufficient to maintain material moisture at 4.0 per cent (or higher) until the material is redistributed. During scraping (removing and unloading) and bulldozing, soils will be watered at a rate sufficient to maintain material moisture at 5.0 per cent (or higher).

6. Land surface treatment for areas previously disturbed: Following excavation, trenches will be backfilled with the excavated soil. The soil will be distributed and contoured evenly over the surface of the disturbed area. The soil surface will be left rough to help reduce potential wind erosion.

7. Land surface treatment for areas previously undisturbed: Strip the top three to six inches of soil material with associated plant material over all surfaces to be disturbed by construction. Stockpile this material along the course of construction (inside the right-of-way area). At the conclusion, including trench backfilling and compaction, replace the stockpiled soil with plant debris uniformly back on the surface of the disturbed area.

8. Holder shall be responsible for weed control on disturbed areas within the limits of the right-of-way. Holder is responsible for consultation with the Authorized Officer and/or local authorities for acceptable weed control methods within limits imposed in the grant stipulations.

9. Any cultural and/or paleontological resources (historic or prehistoric site or object) are discovered by the Holder, or any person working on his behalf; on public on Federal land shall be immediately reported to the Authorized Officer. Holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery will be made by the Authorized Officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. Holder will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the Authorized Officer after consulting with the Holder. Holder shall be responsible for the resultant mitigation costs.

10. Holder shall construct, maintain, operate and/or modify structures and facilities as directed by the Field Manager to protect and minimize adverse effects upon raptors and other wildlife.

11. Holder shall report wildlife fatalities, including raptor electrocutions, that are discovered or near project facilities.

12. Holder shall comply with all applicable local, state, and federal air, water, hazardous substance, solid waste, or other environmental laws and regulations, existing or hereafter enacted or promulgated. To the full extent permissible by law, Holder agrees to

indemnify and hold harmless, within the limits, if any, established by state law (as state law exists on the effective date of the right-of-way), the United States against any liability arising from Holder's use or occupancy of the right-of way area, regardless of whether Holder has actually developed or caused development to occur on the right-of-way area, from the time of the issuance of this right-of-way to Holder, and during the term of this right-of-way. This agreement to indemnify and hold harmless the United States against any liability shall apply without regard to whether the liability is caused by Holder, its agents, contractors, or third parties. If the liability is caused by third parties, Holder will pursue legal remedies against such third parties, as if Holder were the fee owner of the right-of-way area.

Notwithstanding any limits to Holder's ability to indemnify and hold harmless the United States which may exist under state law, Holder agrees to bear all responsibility (financial or other) for any and all liability or responsibility of any kind or nature assessed against the United States, arising from Holder's use or occupancy of the right-of way area, regardless of whether Holder has actually developed or caused development to occur on the right-of-way area, from the time of the issuance of this right-of-way to Holder, and during the term of this right-of-way.

13. Holder shall not violate applicable air standards or related facility siting standards established by or pursuant to applicable federal, state, or local laws or regulations. Holder shall be responsible for dust abatement within the limits of the right-of-way area and is responsible for obtaining all necessary permits from appropriate authorities for acceptable dust abatement and control methods (e.g., water, chemicals). Holder shall be solely responsible for all violations of any air quality permit, law or regulation, as a result of its action, inaction, use or occupancy of the right-of-way area.

Notwithstanding whether a violation of any air quality permit, law or regulation results, Holder will cooperate with the Authorized Officer in implementing and maintaining reasonable and appropriate dust control methods in conformance with law and appropriate to the circumstances, at the sole cost of Holder.

Prior to relinquishment, abandonment, or termination of this right-of-way, Holder shall apply reasonable and appropriate dust abatement and control measures, designed to be effective over the long-term (e.g., rock mulch or other means) acceptable to the Authorized Officer, to all disturbed areas.

14. No hazardous material, substance, or hazardous waste, (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, *et seq*., or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, *et seq*.) shall be used, produced, transported, released, disposed of, or stored within the right-of-way area at any time by Holder. Holder shall immediately report any release of hazardous substances (leaks, spills, etc.), caused by Holder or third parties, in excess of the reportable quantity as required by federal, state, or local laws and regulations. A copy of any report required or requested by any federal, state or local government agency as a result of a reportable release or spill of any hazardous substances shall be furnished

to the Authorized Officer concurrent with the filing of the reports to the involved federal, state or local government agency.

Holder shall immediately notify the Authorized Officer of any release of hazardous substances, toxic substances, or hazardous waste on or near the right-of-way area potentially affecting the right-of-way area of which Holder is aware.

As required by law, Holder shall have responsibility for and shall take all action(s) necessary to fully remediate and address the hazardous substance(s) on or emanating from the right-of way area.

15. The right-of-way area shall be maintained in a sanitary condition at all times; waste materials at those sites shall be disposed of promptly at an approved waste disposal site. "Waste" as used in this paragraph shall mean all discarded matter of any kind.

16. Holder shall mark the exterior boundaries of the right-of-way with stake and/or lath at 100 to 200 foot intervals. The intervals may be varied at the time of staking at the discretion of the Authorized Officer. The tops of the stakes and/or laths will be painted and the laths flagged in a distinctive color as determined by Holder. Holder shall maintain all boundary stakes and/or laths in place until final cleanup and restoration is completed.

17. Holder shall conduct all activities associated with construction, operation, and termination of this right-of-way within its authorized limits.

18. Holder shall maintain the right-of-way in a safe, useable condition, as directed by the Authorized Officer. A regular maintenance program shall include, but is not limited to, soil stabilization.

19. Holder shall provide the Authorized Officer (Assistant Field Manager, Division of Lands) with data in a format compatible with the Bureau's Arc-Info Geographic Information System to accurately locate and identify the right-of-way, within 90 days of construction completion.

Acceptable data formats are:
(1) Corrected Global Positioning System files with sub-meter accuracy or better, in NAD 27 or NAD 83;
(2) An AUTOCAD dxf file;
(3) Or ARCInfo export files on a CD ROM, 100 mb ZIP disk or 1gb Jazz disk.

Data may be submitted in any of the following formats:
(1) ARCInfo export file;
(2) On a 3.5 inch floppy disk in compressed or uncompressed format. Compressed or ZIPed data must include a copy of the UNZIP.EXE file on the disk.

All data shall include metadata for each coverage, and conform to the Content Standards for Digital Geospatial Metadata Federal Geographic Data Committee standards. Contact Mr. Robert Taylor, GIS Coordinator at (702) 515-5051.

20. Holder shall protect all survey monuments found within the authorization area. Survey monuments include, but are not limited to, General Land Office and Bureau of Land Management Cadastral Survey Corners, reference corners, witness points, U.S. Coast and Geodetic Survey benchmarks and triangulation stations, military control monuments, and recognizable civil (both public and private) survey monuments. If any of the above are to be disturbed during operations the holder shall secure the services of a professional land surveyor or Bureau cadastral surveyor to perpetuate the disturbed monuments and references using surveying procedures found in the *Manual of Instructions for the Survey of the Public Lands of the United States* and NRS Chapter 329, *Perpetuation of Corners*. Holder shall record such survey in the appropriate county and send a copy to the authorized officer. If the Bureau cadastral surveyors or other Federal surveyors are used to restore the disturbed survey monuments, Holder shall be responsible for the survey cost.

21. The right-of-way is issued subject to all valid and existing rights.

22. Holder agrees to survey for nests of migratory birds between the periods of March 1 through August 30, and, should a nestling be found, Holder will use properly qualified personnel, as agreed upon by BLM and Holder, to avoid the nest or minimize adverse impacts to the nest and nestling, including relocation of the nest if appropriate. Holder will consult with the Authorized Officer on a case-by-case basis to determine the appropriate minimization efforts.

23. Use of pesticides shall comply with the applicable Federal and state laws. Pesticides shall be used only in accordance with their registered uses and within limitations imposed by the Secretary of the Interior. Prior to the use of pesticides, the Holder shall obtain from the Authorized Officer written approval of a plan showing the type and quantity of material to be used, pest(s) to be controlled, method of application location of storage and disposal of containers and any other information deemed necessary by the Authorized Officer. The plan must provide the type and quantity of material to be used; the pest, insect, storage and disposal of containers; and other information that the Authorized Officer may require. The plan shall be submitted no later than December 1 of any calendar year that covers the proposed activities for the next fiscal year.

Pesticides shall not be permanently stored on public lands authorized for use under this grant.

24. Holder shall maintain a copy of the authorization along with stipulations at the construction site at all times.